

on specific performance. In addition, it raises new research questions regarding the mode of practice and provision of preventive services. We encourage the continued exploration of the influence of the method of payment on the provision of health promotion and disease prevention services by physicians.

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Management of Heat Illness Syndromes

IN ATHLETIC COMPETITION, when the heat injury index approaches 20°C or 70°F, particular preventive measures—such as jersey changes or more water breaks—should be started, particularly for more susceptible persons. There are three heat illness syndromes: heat cramps, heat exhaustion or heat syncope, and heat stroke. One does not necessarily progress from one category to the next and may enter the scheme in the middle or at the very end.

Heat cramps occur mostly in the calf, thigh, abdomen, and the arms. They occur without injury and are caused by water or electrolyte loss or both. Treatment requires removal from the activity, gentle stretching, and replenishment of fluid.

Heat exhaustion or heat syncope results from an inadequate cardiovascular response to the stress of heat. One sees signs and symptoms related to an inadequate circulating blood volume. The presence of sweating does not rule out a heat-related illness. The treatment of heat exhaustion is to have the person lie down, elevate the lower extremities and replenish fluids . . . just as you would treat shock. Hypotonic solutions are helpful, but water by itself is most important. The core temperature remains normal.

Heat stroke is a medical emergency and carries a high mortality rate. These persons may show signs and symptoms similar to those of heat exhaustion. They become disoriented, irritable, aggressive, and emotionally labile. Taking rectal temperatures is a necessity in the management of heat illness syndromes. A reading of greater than 106° requires immediate cooling in an iced bath, or—second best—by fans blowing over wet sheets or towels. Intravenous fluid replacement should begin immediately, and the patient should be sent to hospital, since severe medical problems may develop, even after successful treatment.

Since long-term problems related to heat injury may be quite dangerous, prevention, of course, is the best course.

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